UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

March 16, 2015

Mr. Robert Winters
U.S. Army Corps of Engineers District, Portland
Attn: CENWP-PM-E-14-08/Double-crested Cormorant Final EIS
P.O. Box 2946
Portland, Oregon 97208-2946

Dear Mr. Winters:

The U.S. Environmental Protection Agency has reviewed the Final Environmental Impact Statement for the Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary (EPA Region 10 Project Number 14-0032-COE). We are submitting comments in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The Final EIS preferred alternative is Alternative C-1, which is a modification of Alternative C from the Draft EIS. Alternative C-1 somewhat reduces the cull of Double-crested Cormorants (DCCOs) from approximately 18,000 to approximately 11,000 breeding individuals. The remainder of lethal take, which remains at original proposed levels, is stated to be achieved through egg oiling and nest destruction.[1] In the four years of Phase 1, the Corps would shoot DCCOs on-island and over water, oil eggs, and destroy nests to reduce the DCCO colony on East Sand Island to between 5,380 and 5,939 breeding pairs by 2018. Each year 13.5% of the colony would be culled, resulting in a take of 10,912 DCCOs (3,489, 3,114, 2,408 and 1,902 DCCOs in years 1 to 4, respectively). In years 1-3, 72.5% of nests would be lost and in year 4, 13.5% of nests, resulting in 26,096 total nests lost (9,368, 8,361, 6,466, and 1,902 nests lost in years 1-4, respectively). Culling and egg oiling are expected to be highly effective in lethally taking DCCOs due to timing of activities, use of night shooting, use of firearm suppressors, and other proposed methods (p. 2-38).

While the FEIS adds detail to the adaptive management plan and proposes to cull fewer DCCOs, the level of lethal take of DCCOs would not be reduced. We continue to have the following concerns regarding the proposed action:

- We are concerned about the level of lethal take. We believe the amount of lethal take of DCCOs could be reduced if monitoring after some take in the first year shows that salmonid populations are trending toward a sustainable target level.

[1] However, the FEIS states (p. 2-4) that egg destruction/addling/oiling includes any other action that would prevent an egg from hatching, such as shooting an individual incubating an active nest. Thus, the number of birds that would be culled would likely be higher than stated in Alternative C-1.

- We are concerned that this project may set a precedent for the amount and methods of lethal take of native, protected, fish-eating, migratory birds in the western U.S.
- It appears that there is some uncertainty about maintaining a sustainable western population of DCCOs, given that this project will result in a population below the presumed sustainable[2] 1990 abundance, and rely on a potential slow increase over a 20 year period to restore viable numbers.
- We are concerned that the proposed level of lethal take of DCCOs may not achieve the desired balance in ecosystem dynamics. A number of wildlife researchers report that lethal control efforts are counterproductive,[3] and avian predation has not necessarily contributed to the decline of ESA-listed salmonids.[4]

Wise precaution

Given the complexity of biological and physical interactions in dynamic and ever-changing ecosystems, we believe that a precautionary approach to management of protected species is wise. Avian studies cited in the EIS as well as recent environmental changes and events[5] [6] reveal the widespread instability of avian habitats, colonies, and the marine food web in response to climate change. East Sand Island and the bird colonies that inhabit it could be important for supporting adaptation needs in this time of environmental change and transition. While we respect the U.S. Fish and Wildlife Service's expertise in these matters, we are concerned about reducing the DCCO western population below 1990 levels. It is not clear if additional stresses on the DCCO western population were adequately taken into account in the modeling exercise, to incorporate the degree and rate of change in ecosystem dynamics that affect stresses. For example, there may be loss of food sources, habitats, and colonies due to climate change and other human impacts, and increased predation on adults, chicks, and eggs from eagles and gulls. We recommend a precautionary approach that would retain a buffer above the 1990 level to account for these adverse conditions.[7]

We would also encourage the wildlife agencies to take another hard look at DCCO dispersal. Studies cited in the EIS indicate that all DCCO dispersal has occurred to the north, (e.g., to protected waters of Willapa Bay, Grays Harbor, and the Salish Sea); no dispersal to Oregon has been documented. Because Washington has identified areas of low management concern along the north coast, it appears there may be management flexibility for additional DCCO dispersal. We recommend that dispersal of ESI DCCOs to these areas be enabled in an effort to establish additional viable colonies.

Alternatives

As the responsible agencies move forward managing protected predator species and salmonids in this project and future projects, we support maximizing creative thinking, flexibility, precaution, and adaptive management. We understand that the Federal Columbia River Power System Biological Opinion comprehensively addresses mitigation measures across all salmonid life stages, that the

---

[2] FEIS, p. 1-38.

[3] http://www.sciencemag.org/content/341/6152/1332.full

[4] FEIS, p. 2-60.

[5] http://www.pewtrusts.org/en/about/news-room/news/2015/03/06/bad-news-on-the-west-coast-pacific-sardines-are-collapsing

[6] http://abc7news.com/society/sea-lion-deaths-on-the-rise-along-socal-coastline/551000/

[7] FEIS, p. 3-16: Adkins et al. 2014 states that stable, suitable nesting habitat, an abundance of forage fish nearby, and predator protection, provided by safety in numbers, are not characteristics representative of DCCO habitat elsewhere in the affected environment.

Reasonable and Prudent Alternative actions are applicable to the life stage most directly involved, and that evaluation should be directed toward that life stage. We recognize the efficiency of this approach, but would it be possible to modify some of the RPAs if other RPAs could be augmented to support more viable, self-sustaining salmonid populations, and supplant the need for measures that would harm other native species (such as, RPA 46)? For example, among the alternatives considered but rejected by the Corps, there are elements that could be combined to fashion potentially effective alternatives that are responsive to all or most parties' needs and desires. We have discussed several of these in comments above, and list them here along with other potential elements:

- The FEIS states that avian predation (by DCCOs and Caspian terns) is identified as a key limiting factor only for Middle Columbia River steelhead and Upper Willamette River Chinook and steelhead,[8] and NMFS indicates that inclusion of RPA 46 is based primarily on DCCO steelhead consumption estimates.[9] Rather than institute an aggressive lethal DCCO predation reduction program, we recommend consideration of alternatives that would put additional focus on primary reasons for ESA listings, such as habitat restoration to improve floodplain connectivity and function, channel structure and complexity, riparian areas and large woody debris recruitment, amount of stream substrate, stream flow, water quality, and dam passage/operations. Funds being used for RPA 46 could be re-directed for this purpose.

  Other actions to improve fisheries, particularly steelhead:
  - Augment outputs of steelhead at one or more hatcheries.
  - Consider restrictions (new or additional) on recreational, non-tribal steelhead fisheries (e.g., catch and release only in the Middle Columbia and Upper Willamette basins).
  - Take additional measures to reduce competition with non-native species.

- Regarding DCCO predation reduction, we recommend (1) that DCCO lethal take be minimized as much as possible, (2) that any lethal take be performed in the most humane manner available (e.g., egg oiling), and (3) that agencies allow for flexibility in the 2018 timeline.

- As discussed above, consider enabling dispersal to Washington coastal, Salish Sea, and British Columbia regions. If monitoring confirms dispersal to the Oregon coast, provide some funds for hazing to ODFW, if needed.

We appreciate the opportunity to offer comments. If you have questions or would like to discuss these comments, please contact me at (206) 553-1601 or via electronic mail at Reichgott.christine@epa.gov, or contact Elaine Somers of my staff at (206)553-2966 or via electronic mail at somers.elaine@epa.gov.

Sincerely,

Christine B. Reichgott

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

[8] FEIS, p. ES-8.

[9] R. Graves, NMFS, pers. comm. NMFS estimates an average annual 6.7 % mortality for juvenile steelhead from 2003-2009 resulting from DCCO predation (p. ES-6).